

Claims

1. Air cleaning device from air polluted space into closed space, especially for cleaning air breathed in by living organism, in the preferably axially symmetric house of which device there is an insulating disc with openings for introducing polluted air on its one side orthogonal to the axis of the house situated at the atmospheric side, and also, there is a perforated insulating front surface on the other side of the house orthogonal to the axis opposite to the insulating disc at the user side, further, there are supporting tubes situated parallel to the axis acting as a boundary for the air flow, and there are positively and negatively charged scattering electrode wires, **characterized** in that
 - the electrode system generating the electric field is situated inside supporting tubes (8) made of electrically conducting material that can be connected to 0 potential, and further, the entire curved surface of the supporting tubes (8) or at least their portion close to the front surface (5) is covered with screen (7) of low air resistance allowing diffuse flow, while the space in the house (6) between the supporting tubes (8) is filled with filter insert medium (16).
2. Air cleaning device according to claim 1 **characterized** in that the supporting tubes (8) are fixed to the insulating disc (9) situated parallel to the front wall (3) on the atmospheric side, preferably they are fitted into the circular grooves formed on the insulating disc (9).
3. Air cleaning device according to claim 1 or claim 2 **characterized** in that inside each supporting tube (8), there is an electrode holder (11), preferably cylindrical electrode holder (11) made of plastic, arranged coaxially with the supporting tube (8).
4. Air cleaning device according to claim 3 **characterized** in that there are even-numbered scattering electrode wires (12) arranged in circular symmetric configuration on the curved surface of the electrode holders (11), parallel to the axis of the electrode holder

(11), and the scattering electrode wires (12) are connected to the electronic power supply (14) after crossing the insulating disc (9).

5. Air cleaning device according to claim 4 **characterized** in that the electronic power supply (14) is situated in the axis of the house (6) insulated air-tight from the other parts of the house (6) preferably by the inside bordering wall (13).
6. Air cleaning device according to any of claims 1 - 5 **characterized** in that at their end at the front surface (5) on the user side, the supporting tubes (8) are closed air-tight by the separate front disc (15) or by being connected directly to the front surface (5).
7. Air cleaning device according to claim 6 **characterized** in that the ends of the electrode holders (11) on the user side are connected to the front disc (15) or to the front surface (5).
8. Air cleaning device according to any of claims 1 - 7 characterized in that the screen (7) is made electrically conductive by vacuum spraying.